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10/568,970	02/22/2006	Marcus Guzmán	285634US0PCT	8863
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER BOYLE, ROBERT C				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
06/09/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/568,970

Applicant(s)

GUZMANN ET AL.

Examiner

ROBERT C. BOYLE

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1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 10-12, 14, 16 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6, 10-12, 14, 16 and 22-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/003)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Any rejections stated in the previous Office Action and not repeated below are withdrawn. The objections presented in the previous Office Action are withdrawn.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on April 10, 2009. In particular, all claims have been amended to depend from claim 11, which is now an independent claim. Claim 11, as now written, contains a scope different than the original claim 11. In particular, amended claim 11 does not require at least one additive selected from the Markush group of claim 10. The amendment changes the scope of those dependent claims that were originally dependent on claim 1 but now depend on amended claim 11. In addition, claims 22-30 have been added. Thus, the following action is properly made FINAL.

Claim Rejections - 35 USC § 103

4. Claims 2-6, 10-12, 14, 16, and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong et al., (US 4,604,431) in view of Krause et al., (US 5,760,154). It is noted that claims 11, 23 and 29 are independent claims, and claims 2-6 and 10 depend from claim 11.

5. As to claims 11 and 23, Applicants attention is drawn to MPEP 2111.02 which states:

[I]f the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. (MPEP 2111.02)

6. Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim. It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. "method of cleaning dishware" of claim 11, and "as a rinse aid" of claim 23, does not result in a structural difference between the presently claimed invention and the prior art invention and further that the prior art structure which is a composition identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

7. As to claims 11 and 23, Fong teaches reacting acrylamido sulfonic acids with at least 5 mol% acrylic acid or methacrylic acid groups in a polymer made of 100% carboxylic acid groups and using copolymers (abstract; column 1, lines 54-56, 63-64). Fong does not teach using at least two different carboxylic acid monomers or a method of cleaning dishware.

8. Krause teaches making sulfonated polymers using at least two monomers: a monoethylenically unsaturated carboxylic acid and a water soluble, radically polymerizable monomer and Krause teaches a method of cleaning dishware with a polymeric composition and using the composition to rinse the dishware in a machine (column 4, lines 14-31, column 7, lines 28-47). It would have been obvious that a radically polymerizable and water soluble monomer would be a second unsaturated carboxylic acid. It would have been obvious to one of ordinary skill in the art to use the monomers of Krause with the polymers of Fong because both teach acrylic acid polymers with sulfonic acid monomers and the addition of functional monomers allow a higher degree of polymerization or branching (Krause: column 5, lines 54-63) which give an improved hydrophilic suspending capacity and an increased efficiency with respect to complexing metal ions (Krause: column 4, lines 5-13) and would allow the polymer to be more soluble in aqueous solutions.
9. As to claims 2 and 24, Fong teaches using acrylic acid and methacrylic acid (column 1, lines 54-56). Krause teaches using acrylic acid and methacrylic acid (column 5, lines 30-32).
10. As to claims 3 and 25, Fong discloses polymers of only acrylic acid or methacrylic acid (column 1, lines 63-64).
11. As to claims 4, 14 and 26, Fong teaches using acrylic acid and methacrylic acid (column 1, lines 54-56). Krause teaches using acrylic acid and methacrylic acid (column 5, lines 30-32).

12. As to claims 5, 16 and 27, Krause teaches a copolymer that can have 45-96 wt% a first carboxylic acid and 0-45 wt% of a second carboxylic acid which is water soluble and radically polymerizable (column 4, lines 5-35). It is well settled that where prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See MPEP 2144.05; *In re Harris*, 409, F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 3d 1379, 1382 (Fed. Cir 1997); *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).
13. As to claims 6 and 28, Fong teaches aminoethanesulfonic acid is the sulfonic acid reacted with the monomers or copolymer (column 2, lines 22-24).
14. As to claim 10, Krause teaches a composition with sodium carbonate (column 7, lines 28-42).
15. As to claim 12, Krause teaches the composition including a low foam non-ionic surfactant (column 7, lines 28-47).
16. As to claim 22, it would have been obvious to use a dishwashing detergent in a machine dishwasher. In the alternative, Krause teaches using a machine dishwasher (column 7, lines 28-47).
17. As to claims 29-30, Fong teaches a composition of a copolymer formed from reacting acrylamido sulfonic acids with at least 5 mol% acrylic acid or methacrylic acid groups in a polymer made of 100% carboxylic acid groups and using copolymers (abstract; column 1, lines 54-56, 63-64). Krause teaches a composition of sulfonated

polymers using at least two monomers, such as a monoethylenically unsaturated carboxylic acid and a water soluble, radically polymerizable monomer, where the composition also includes sodium carbonate and a low foam non-ionic surfactant (column 4, lines 14-31, column 7, lines 28-47).

Response to Arguments

18. Applicant's arguments filed April 10, 2009 have been fully considered but they are not persuasive.

19. In response to applicant's argument that Fong (US 4,604,431) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Fong is reasonably pertinent to the particular problem with which the applicant was concerned.

20. The particular problem can be stated as cleaning dishware so that the ware is not only completely cleaned of food residues, but also has no whitish marks which arise due to the presence of limescale or other inorganic and organic salts during the drying of water drops (see instant specification: page 1, lines 20-24, paragraph 0006). Additionally, Applicant looks to prior art that binds "the hardness-forming calcium and magnesium ions in the main wash cycle..." (instant specification: page 1, lines 40-41,

paragraph 0009). In light of this, it can be paraphrased that the removal of inorganic and organic salts is a particular problem at hand.

21. As noted by Applicant on page 8 of the Remarks filed April 10, 2009, Fong teaches polymers for use as flocculants (Fong: column 1, lines 10-12). Flocculation is defined as the process by which fine particles, suspended in a liquid medium, form stable aggregates and flocculation is principally used in solid-liquid separations, notably for removal of inorganic particles (see pages 1-2, Heitner, *Flocculating Agents*, Kirk-Othmer Encyclopedia of Chemical Technology, July 16, 2004).

22. As Fong teaches a polymer that will cause inorganic salts to be removed from solution, and the instant application is concerned with the removal of inorganic salts, Fong is reasonably pertinent and therefore is analogous art. Therefore, Applicant's argument is not persuasive.

23. Applicant further argues that no nexus has been established between the polymers of Fong and Krause such that one skilled in the art would expect them to have similar properties because Fong teaches polymers with acrylic acid or methacrylic acid as backbones and Krause teaches polymers with polyhydroxy compounds as backbones. This is not persuasive.

24. Krause teaches polymers with backbones of unsaturated acids by means of radical polymerization initiators (Krause: abstract; column 9, lines 40-64). The section cited by the applicant (Krause: column 4, line 38) teaches the preferred polyhydroxy compounds which are grafted to the polymers of Krause (Krause: column 4, lines 5-13).

Because both Krause and Fong teach polymers with acrylic acid monomers in the backbone, Applicant's argument is not persuasive.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ROBERT C. BOYLE** whose telephone number is (571)270-7347. The examiner can normally be reached on Monday-Friday, 9:00AM-5:00PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. C. B./
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796